at all in the ash, or a very dubious trace, due probably to imperfect extraction.

The ash always contains iron, and the iron is not removed from the precipitate by extraction with alcohol containing hydrochloric acid. This description applies equally to the fibrinogen obtained from the tissues and the fibrinogens present in blood.\*

Under appropriate conditions these fibrinogens can be entirely converted into fibrin. The fibrin always contains lecithin; but fibrin differs from the fibrinogens from which it is formed by being absolutely and entirely soluble in artificial gastric juice. This remarkable difference in the behaviour of the two classes of substances towards artificial gastric juice is considered by the author as strong evidence that the relation between the lecithin and the proteïd which both bodies contain must be different in the two cases.

That lecithin was a very important factor in coagulation was shown by the author many years ago, and this fact has been fully confirmed by pupils of Alexander Schmidt (Nauck, Samson-Himmelstjerna, Krüger).

Ordinary fibrin obtained by whipping blood always leaves an undigested residue, due partly to the presence of admixed white corpuscles (Hammarsten), partly, however, to its containing unchanged fibrinogen. Fibrin obtained from pure fibrinogen fluids by artificially induced coagulation is always completely digestible if care be taken that it contains no unchanged fibrinogen. The fibrin obtained by the action of ferment on fibrinogen is always completely digestible (Hammarsten).

II. "A new Method for determining the Number of Microorganisms in Air." By Professor Carnelley, D.Sc., and Thos. Wilson, University College, Dundee. Communicated by Sir Henry Roscoe, F.R.S. Received February 3, 1888.

## (Abstract.)

This is a modification of Hesse's well-known process. It consists essentially in the substitution of a flat-bottomed conical flask for a Hesse's tube. Its chief advantages are:—(1.) Much smaller cost of flask and fittings as compared with Hesse's tubes; (2.) Very many fewer breakages during sterilisation; (3.) Great economy in jelly; (4.) Freedom from leakage during sterilisation; (5.) Results not vitiated by aërial currents.

<sup>\*</sup> The presence of iron in an organic form in blood plasma was described by the author in the Arris and Gale Lectures, delivered before the Royal College of Surgeons in 1886. Pamphlet, 1886.